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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/006,155	12/10/2001	Raafat R. Mansour	39437	9696

24629 7590 03/27/2003

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EXAMINER

GLENN, KIMBERLY E

ART UNIT

PAPER NUMBER

2817

DATE MAILED: 03/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

10/006,155

MANSOUR, RAAFAT R.

Examiner

Art Unit

Kimberly E Glenn

2817

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-39 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 6) ☐ Other: \_\_\_\_\_.

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## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-39 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1,2, 21, 22, 38 and 38 all recite a “cut resonator”, Examiner is unclear what applicant means by this terminology. Is applicant referring to a resonator whose shape has been altered (cut) or is applicant referring a specific type of resonator? With regards to claims 2 and 22, it is unclear what would be considered “a half cut resonator” because there is not detailed description of what is considered the whole resonator.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

In light of the above 35 USC 112 rejection, Claims 1-4, 13,19, 21-24, 34, 36, 38 and 39 rejected under 35 U.S.C. 102(b) as being anticipated by Fiedziusko et al US Pat. 5.179.074.

Examiner is interpreting “cut resonator” to means that the shape of the resonator has been altered.

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Fiedziuszko et al disclose a filter comprising at least one cavity 22 with said at least one cavity having a half cut resonator 14' therein, said cavity having at least one wall 12 and said resonator being out of contact with said at least one wall. (Figure 3 and column 4 lines 55-61) The resonator is a conductor-loaded resonator. The superconductive layers 18 are the conductors. The cavity has a rectangular shape and said resonator is planar mounted. The conductor-loaded resonator (14' and 18) is used in combination with at least one dielectric resonator 14'. The resonators operated in TE modes. Fiedziuszko et al disclose in column 3 lines 60-68 that the resonators are constructed on a high performance ceramic such as zirconium stannate or advanced perovskite. Ballato US Pat. 4,871,986 teaches a crystal resonator made of zirconium titanate ceramics. (column 2 line 66 through column 3 line 2) Therefore, Fiedziuszko et al discloses the conductor loaded resonator being made from a single crystal. The method steps to the above apparatus are inherent.

***Allowable Subject Matter***

Claims 5-12, 14-17, 20, 25-33, 35 and 37 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

With regards to claims 5-11, 15, 25-30, 32 and 35, the prior art of record does not disclose or fairly teach the resonator having a modified shape. With regards to claims 12 and 33, the prior art of record does not disclose or fairly teach the resonator being made of superconductive material. With regards to claims 20 and 31, the prior art of record does not disclose or fairly teach the resonator being made of metal (copper).

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Nishikawa et al US Pat. 4,423,397, Tiihonen US 2002/0025569 and Abdelmonem US Pat. 6,314,309.

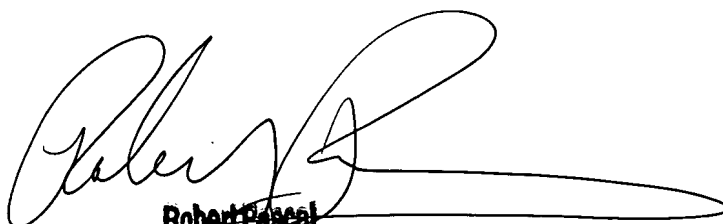
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimberly E Glenn whose telephone number is (703) 306-5942. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pascal can be reached on (703) 308-4909. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7724 for regular communications and (703) 308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Kimberly E Glenn  
Examiner  
Art Unit 2817

keg  
March 20, 2003

  
Robert Pascal  
Supervisory Patent Examiner  
Technology Center 2817